REMARKS/ARGUMENTS

Claims 1, 6, and 34-40 are currently pending in this application. Claims 1, 6, and 34-36 are amended. Claims 41-45 are new.

Examiner Interview

The Examiner is thanked for granting an in-person interview with the Applicant's representatives on November 17, 2011. During the interview, the pending claims were discussed.

Claim Rejection - 35 USC §103

Claims 1, 6, 34, and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,056,106 to Wang (hereinafter "Wang") in view of U.S. Patent No. 6,175,308 to Tallman (hereinafter "Tallman") further in view of U.S. Patent No. 4,954,958 to Savage (hereinafter "Savage"). The Applicants respectfully disagree.

Wang discloses a method using a spread-spectrum based radiolocation system using hand-held receiver units and fixed-position reference transmitters for determining distance and direction between a golfer and key locations on a golf course (see Abstract). The hand-held receiver receives pseudo-noise coded signals

from a plurality of transmitters in order to determine a distance measurement on the course (see Figure 1 and column 4, lines 58-65). Each transmitter broadcasts at the same RF signal but a unique PN-coded sequence is assigned to each transmitter (see column 5, lines 32-36).

Each hand-held receiver is provided with a PN code epoch recovery processor for receiving the PN-modulated carriers of the transmitters. Then, a time difference measurement processor is used to determine the time difference between the local code timing epoch and the received, tracked code epoch of each of the transmitted signals. Based on this information, a distance and direction determination processor determines the distance between a golfer and a particular target (see column 6, lines 12-22).

Distance to a particular target is obtained using hyperbolic location techniques, based on the known coordinates of the transmitters, the known coordinates of the hole, the known coordinates of a fixed reference point for each hole, and the arrival time measurements obtained by the receiver by tracking the four selected transmitter signals (see column 7, lines 53-60). More particularly, distance is determined using location techniques based on the known coordinates of four selected transmitters, the known coordinates of the hole, the known coordinates of a fixed reference point for each hole, and the arrival time

measurements [t_i], i=1,...,4 obtained by the receiver for tracking the four selected transmitter signals (see column 7, lines 53-68). Unlike the pending claims, the location determination technique of Wang requires acquiring and measuring the time-of-arrival of four transmitter signals relative to a local receiver clock (see column 11, lines 16-39).

Wang fails to teach or suggest "receiving, at the subscriber unit, the plurality of spread spectrum signals and determining a plurality of chip timing differences from the plurality of spread spectrum signals, wherein each determined chip timing difference indicates a difference in received chip offset between a pair of antennas of the plurality of antennas" and "determining a location of the subscriber unit using hyperbolas and the determined plurality of chip timing differences" as recited in the independent claims.

Tallman discloses a security system that provides accurate, meaningful, real time monitoring of persons and objects while being further responsive to a number of alarm conditions (see column 2, lines 55-63). Tallman teaches that a tracking unit attached to a mobile unit to be monitored to sense and transmit identity, location, direction of travel and alarm condition information to a computer monitoring station (see column 4, lines 14-18). The tracking unit is operative to receive the location signals broadcast by the infrared (IR) transmitters. Upon

receipt of the location signal, the tracking unit generates a watchdog signal that carries the two most recently received location signals, as well as a unique reader identification code, then transmits the watchdog signal on a radio frequency (RF) signal (see column 6, lines 37-44). The watchdog signal is transmitted using a 900 MHz spread spectrum technology via an internal wire antenna (see column 6, lines 54-56).

Both Wang and Tallman fail to teach or disclose "receiving, at the subscriber unit, the plurality of spread spectrum signals and determining a plurality of chip timing differences from the plurality of spread spectrum signals, wherein each determined chip timing difference indicates a difference in received chip offset between a pair of antennas of the plurality of antennas" and "determining a location of the subscriber unit using hyperbolas and the determined plurality of chip timing differences" as recited in the amended independent claims.

Savage discloses a system that enables a user to determine a desired geographical route between supplied locations (see abstract). Savage teaches the use of a central processor to generate routing information directions for travel between two locations. According to Savage, a user inputs a sequence of numbers into a system where the sequence of numbers represents a user access code and location identification numbers corresponding to geographic locations of origination

and destination (see column 3, lines 39-50). The location identification numbers are telephone numbers (see column 3, lines 45-46). The central processor then retrieves the origination and destination identification numbers and correlate the numbers to geographic locations using information stored in a directory listing database (see column 3, lines 63-67). The geographic location addresses are communicated to the user by data display on a terminal or vocally by digitized or synthesized voice (see column 4, lines 5-7).

Savage merely discloses a method that enables a user to determine a desired geographical route between supplied locations. Savage fails to teach or disclose a device that is capable of determining its location. Instead, according to Savage, the location of a device is only provided after enters a sequence of numbers where the sequence of numbers corresponds to an address in a database maintained in the system.

The combination of Savage, Wang and Tallman fails to teach or disclose "receiving, at the subscriber unit, the plurality of spread spectrum signals and determining a plurality of chip timing differences from the plurality of spread spectrum signals, wherein each determined chip timing difference indicates a difference in received chip offset between a pair of antennas of the plurality of antennas" and "determining a location of the subscriber unit using hyperbolas and

the determined plurality of chip timing differences" as recited in the amended independent claims.

Based on the arguments presented above, withdrawal of the §103(a) rejection of claims 1, 6, 34, and 35 is respectfully requested.

Claim 36 is rejected under 35 U.S.C. §103(a**)** as being unpatentable over U.S. Patent No. 3,714,573 to Grossman in view of Wang further in view of U.S. Patent No. 4,954,958 to Savage. The Applicants respectfully disagree.

Grossman discloses a method in which an apparatus repetitively transmits a uniquely coded spread-spectrum identification signal. The signal is received at a plurality of antenna locations and provided to a central station where it is used to provide information from which the identity of the vehicle is determined. The received signals are processed at the central station to determine relative differences in the time of arrival of the signals at each antenna in order to determine the location of the apparatus (see abstract.)

However, as stated above, both Grossman and Wang fail to teach or disclose "the plurality of antennas configured to receive location information from a subscriber unit over a spread spectrum signal, wherein the received location information is determined using a plurality of chip timing differences from the transmitted plurality of spread spectrum signals and hyperbolas, each determined

chip timing difference indicating a difference in received chip offset between a pair of antennas of the plurality of antennas" as recited in the amended claim 36.

As recited above, Savage merely discloses a system that enables a user to determine a desired geographical route between supplied locations (see abstract). Again, as shown in the arguments above, there is no teaching or suggestion to combine the teachings of Wang and Tallman with the teachings of Savage. Withdrawal of the §103(a) rejection of claim 36 is respectfully requested.

Claims 37, 38 and 39 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,056,105 to Wang in view of U.S. Patent No. 6,175,308 to Tallman in view of U.S. Patent No. 4,954,958 to Savage further in view of U.S. Patent No. 4,679,147 to Tsujii (hereinafter "Tsujii"). The Applicants respectfully disagree.

Tsujii discloses a navigator in which road map information is displayed on a CRT and running trace in the direction of movement of an automobile are displayed while being superimposed on the road map information (see column 1, lines 5-10). Tsujii provides for a means for setting specified circular areas centered on respective crossings on road map information and detecting a car which reaches a particular specified circular area, computing means for computing an angular difference between an approaching running direction and a destination bearing at

an entrance to the particular circular area, and running direction instructing means responsive to computation results for issuing voice instructions which apprize the driver of a running direction of the car at a crossing associated with the particular area (see column 1, line 65 to column 2, line 8).

As shown above, Tsujii discloses an internal car solution for determining location based on the distance the car has traveled and a point of direction. Tsujii and the combination of cited references fail to teach or disclose providing turn-by-turn directions from an external source as recited in the pending claims. The combination of the cited references fails to teach or disclose "providing turn-by-turn directions in response to the determined location using voice commands, wherein the directions are provided by the location service" as recited in pending claims 37-39.

Further, claims 37, 38, and 39 are dependent on independent claims 1, 6, and 35. Based on the arguments presented with respect to the independent claims above, withdrawal of the §103(a) rejection of claims 37, 38 and 39 is respectfully requested.

Claim 40 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,714,574 to Grossman in view of U.S. Patent No. 5,056,106 to Wang in

view of U.S. Patent No. 4,954,958 to Savage further in view of U.S. Patent No. 4,679,147 to Tsujii.

Claim 40 is dependent on independent claim 36. Based on the arguments presented above with respect to independent claim 36 and dependent claims 37-39, withdrawal of the §103(a) rejection of claim 40 is respectfully requested.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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Enclosures (2)